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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/603,339	06/26/2000	James Alan Strothmann	RCA-88878	2228

7590 05/22/2003
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EXAMINER

SHANG, ANNAN Q

ART UNIT	PAPER NUMBER
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2614

DATE MAILED: 05/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/603,339

Applicant(s)

STROTHMANN ET AL.

Examiner

Annan Q Shang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4. 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 5-7, 10 and 14-18 are rejected under 35 U.S.C. 102(b) as being anticipated by **Winter (WO 99/29104)**.

As to claim 1, note the **Winter** reference figure 7, discloses an apparatus for generating a digital video picture composed of a plurality of components, a main picture and secondary picture and further discloses a method for providing graphics for display. The claimed method comprising...is met as follows: the claimed "receiving a bitstream...is met by Receiver 41, note figure 7 and page 11, lines 17-25, note that the Receiver 41 is a satellite receiver or a set-top box for digital television reception and the bit stream, including a video, audio data as well as data for subtitles, is read from a DVD or received via an antenna/satellite; the Separator Circuit 43, extracts the video, audio and subpicture data and transferred accordingly to a Video Decoding Unit 44, which generates an image signal and a Subpicture Decoding 45 or an Audio Decoding Unit 46, note page 11, lines 26-36; the claimed "combining....is met by Multiplexing Unit 47, note page 11, line 36-page 12, line 6, note that the Multiplexing Unit 47 combines the audio/video signal, the program image signal, and the subpicture, the graphical image signal, to provide and output display signal, output 57, note page 12, lines 4-19.

As to claim 2, Winter further discloses where the received bit stream comprises a plurality of DVD subpicture bit stream which are extracted and decoded to generate a plurality of graphical image signals, note figure 8 and page 14, line 37-page 15, line 14.

As to claim 3, Winter further discloses where at least one of the DVD subpicture compliant bitstreams is buffered, note page 14, line 37-page 15, line 15.

As to claim 5, Winter further discloses where the DVD subpicture compliant bitstream comprises an MPEG still image, note page 11, lines 23-37 and page 12, line 38-page 13, line 17, note that the subpictures are still images.

As to claim 6, Winter further discloses where the DVD subpicture compliant bitstream comprises an interactive program guide, note page 3, line 28-page 4, line 9.

As to claim 7, Winter further discloses where the DVD subpicture compliant bitstream comprises an interactive graphic, note page 14, lines 15-36,

As to claim 10, note the **Winter** reference figure 7, discloses an apparatus for generating a digital video picture composed of a plurality of components, a main picture and secondary picture and further discloses a video signal processing apparatus. The claimed apparatus comprising...is met as follows: the claimed "means for receiving a bitstream...is met by Receiver 41, note figure 7 and page 11, lines 17-25, note that the Receiver 41 is a satellite receiver or a set-top box for digital television reception and the bit stream, including a video, audio data as well as data for subtitles, is read from a DVD or received via an antenna/satellite; the Separator Circuit 43, is a means for parsing the received bitstream and routing the video and audio, MPEG compliant bitstream, to a Video Decoding Unit 44, MPEG Decoder, and routing the DVD subpicture to a

Subpicture Decoding Unit 45, DVD subpicture processor where the Video Decoding Unit 44, generates a program image signal in response to the audio/video data and the Subpicture Decoding Unit 45 which generates graphical image signal in response to DVD Subpicture data, note page 11, lines 26-36; the claimed "combining....is met by Multiplexing Unit 47, note page 11, line 36-page 12, line 6, note that the Multiplexing Unit 47 combines the audio/video signal, the program image signal, and the subpicture, the graphical image signal, to provide and output display signal, output 57, note page 12, lines 4-19.

Claim 14 is met as previously discussed with respect to claim 3.

Claim 15 is met as previously discussed with respect to claim 2.

Claim 16 is met as previously discussed with respect to claim 3.

As to claim 17, Winter further discloses where the apparatus further comprises a display processor, inherent to TV set 10, coupled to a Multiplexing Unit 47, Combining means, the generating an interactive program in response to the graphic image signal note page 6, lines 2-page 7, line 25,

As to claim 18, Winter further discloses an apparatus further comprises display processor, inherent to TV set 10, coupled to Multiplexing Unit 47, Combining means, the display processor generating an interactive menu in response to the graphic image signal, note page 6, lines 2-page 7, line 25.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4, is rejected under 35 U.S.C. 103(a) as being unpatentable over **Winter (WO 99/29104)** as applied to claims 1 and further in view of **Arai et al (EP 0 921682)**.

As to claim 4, **Winter** teaches all the claimed limitation as previously discussed with respect to claim 1, but fails to specifically teach where the DVD subpicture compliant bitstream repeats in the MPEG bitstream. However, note **Arai et al** reference figure 1, disclose a program information producing apparatus, broadcasts program information of the next program belong to the same program group as a subjective program in addition to the program information of the subjective program and broadcast receiving apparatus, displays the program information of the next program based on the received information of the subjective program, and allows a viewer to check its content and further disclose dividing program information data into MPEG-2 TS packets and repetitively transmitting section to the Multiplexing Unit 17 with the main program information produced from the video/audio stream, note col. 13, lines 1-58.

Therefore the examiner submits it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Arai into the system of Winter in order to receive a continuous flow of information, e.g. text, caption, subpictures, etc.,

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5. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Winter (WO 99/29104)** as applied to claim 7 above and further in view of **Kikinis (5,929,849)**.

As to claims 7 and 8, **Winter** teaches all the claimed limitation as previously discussed with respect to claim 7, but fails to specifically teach where the interactive graphic comprises selectable regions that, when selected, causes the display of other DVD subpicture graphics and where it causes the receiver to decode a particular MPEG bitstream. However, note the **Kikinis** reference figure 1, discloses a display system that receives a data stream having successive image frame data in frame regions and Internet Universal Resource Locator (URL) data and associated data in the regions between frame regions, and displays on the a display monitor successive frames with one or more URLs, and a viewer, by selecting an associated image entity in the display, causes the system to access the Internet, connect to a source on the Internet associated with the URL, to download a WEB page from the source, and display the WEB page in the display, note col. 5, lines 17-55 and col. 7, line 18-56.

Therefore the examiner submits it would have been clear obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of **Kikinis** into the system of **Winter** in order to allow the user to interactive with data subpicture or graphic images to retrieve other information.

6. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Winter (WO 99/29104)** as applied to claim 10 above and further in view of **Yanagihara et al (6,211,800)**.

As to claims 11 and 12, **Winter** teaches all the claimed limitation as previously discussed with respect to claim 10, but fails to specifically teach where the receiving means comprises a digital interface and demodulator coupled to the digital interface and the MPEG decoder, where the digital interface is IEEE 1394 digital Interface. However, note **Yanagihara** reference figure 5, disclose Data that is an MPEG program stream (PS) read out from a disc is supplied to a PS/TS Converter via a variable rate control section and PS/TS Converter converts the PS MPEG data into a transport stream (TS) and transmits it to a presentation device via a 1394 transmission/reception section where the 1394 transmission/reception section of the presentation device is classified by a DEMUX section, an audio, video decoder that decodes TS MPEG data and D/A converters that converts resulting digital data into analog signals and output the analog signals, note col. 5, line 43-col. 6, line 20.

Therefore the examiner submits it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Yanagihara in order provide and high speed interface that transfers good quality video with low bandwidth.

7. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Winter (WO 99/29104)** as applied to claim 10 above and further in view of **Suzuki (6,344,836)**.

As to claim 13, **Winter** teaches all the claimed limitation as previously discussed with respect to claim 10, but fails to specifically teach where the receiving means comprises a digital interface and demodulator coupled to the digital interface and where the digital interface is a USB digital interface. However, note the **Suzuki** reference

figure 1, disclose an information browsing system with one system device and a plurality of displays connected to the system device by a USB digital interface, note figure 1 and col. 5, lines 10-23 and col.6, line 6-20.

Therefore the examiner submits it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of into the system of Suzuki in order to provide a digital interface that easily connect devices together.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Grandin et al (6,378,132) disclose a signal capture and distribution system.

Watts et al (6,324,694) disclose method and apparatus for providing subsidiary data synchronous to primary content data.

Karlsson et al (6,523,081) disclose architecture using dedicated endpoints and protocol for creating a multi-application interface and improving bandwidth over universal serial bus.

Shimomura et al (6,526,580) disclose a Broadband data broadcasting service.

Sampsell (6,219,839) discloses on-screen electronic resources guide.

Nakatsugawa (6,167,061) discloses transmitter, receiver, communication apparatus, communication method and communication system.

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Annan Q Shang whose telephone number is 703-305-2156. The examiner can normally be reached on 700am-500pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W Miller can be reached on 703-305-4795. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-5991 for regular communications and 703-746-5991 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the customer service whose telephone number is 703-306-0377.



Annan Q. Shang
May 16, 2003



JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600